



NEW

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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL

For FY 2008

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 180.00

Complete if Known

Application Number	10/500,480
Filing Date	12/13/2004
First Named Inventor	Hudson Freeze
Examiner Name	MacAuley, S.R.
Art Unit	1651
Attorney Docket No.	BURNHAM-08831

METHOD OF PAYMENT (check all that apply)

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☒ Deposit Account Deposit Account Number: 08-1290 Deposit Account Name: Medlen & Carroll LLP

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	310	155	510	255	210	105	
Design	210	105	100	50	130	65	
Plant	210	105	310	155	160	80	
Reissue	310	155	510	255	620	310	
Provisional	210	105	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

Fee (\$)

Small Entity Fee (\$)

50 25

Each independent claim over 3 (including Reissues)

210 105

Multiple dependent claims

370 185

Total Claims Extra Claims Fee (\$)

Fee Paid (\$)

Multiple Dependent Claims

Fee (\$) Fee Paid (\$)

- 20 or HP = x 25 =

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims Extra Claims Fee (\$)

Fee Paid (\$)

- 3 or HP = x 105 =

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$260 (\$130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$)

Fee Paid (\$)

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4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Fees Paid (\$)

Other (e.g., late filing surcharge): Submission of Information Disclosure Statement

180.00

SUBMITTED BY

Signature	Mahattamandan	Registration No. (Attorney/Agent)	43,655	Telephone	415.904.6500
Name (Print/Type)	Maha A. Hamdan	Date	04/09/2008		

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Freeze *et al.*
Serial No.: 10/500,480
Filed: 12/13/04
Entitled: **Novel Ligand Involved in the
Transmigration of Leukocytes**

Group No.: 1651
Examiner: MacAuley, S.R.

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
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CERTIFICATE OF MAILING UNDER 37 CFR § 1.8(a)

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By:

Cliff Cannon-Cin

Sir or Madam:

The citations listed below may be material to the examination of the above-identified application, and are therefore submitted in compliance with the duty of disclosure defined in 37 C.F.R. §§ 1.56 and 1.97.

Copies of the references listed as number 16-171 and 174-177 on the enclosed PTO-1449 are enclosed.

Copies of the patent references listed as numbers 1-15 on the enclosed PTO-1449 are not submitted in accordance with 37 CFR § 1.98(a)(2)(ii), since they are U.S. patents or U.S. patent application publications.

In accordance with 37 CFR 1.98 (d), copies of the references listed as 11 and 172-173 on the enclosed PTO-1449 are **not** submitted since they were cited by the Examiner in the Office Actions mailed 9/28/2007 in the instant application.

The Examiner is requested to make these citations of official record in this application.

The following patents are referred to in the body of the specification:

- U.S. Patent No. 4,946,778 issued 8/7/90 to Ladner et al.;
- U.S. Patent No. 4,683,195 issued 7/28/87 to Mullis et al.;
- U.S. Patent No. 4,683,202 issued 7/28/87 to Mullis;
- U.S. Patent No. 4,965,188 issued 10/23/90 to Mullis et al.;
- U.S. Patent No. 5,449,781 issued 9/12/95 to Varki *et al.*;
- U.S. Patent No. 5,760,029 issued 6/2/98 to Jadhav et al.;
- U.S. Patent No. 6,409,990 issued 6/25/02 to Vera;
- U.S. Patent No. 5,270,163 issued 12/14/93 to Gold et al.;
- U.S. Patent No. 4,946,778 issued 8/7/90 to Ladner et al.;
- U.S. Patent No. 4,331,647 issued 5/25/82 to Goldenberg;
- WO 90/13678 published 11/15/90;
- WO 91/11465 published 10/4/90; and
- WO 92/08981 published 5/29/92.

The following printed publications are referred to in the body of the specification:

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- U.S. Patent No. 5,738,996 issued 4/1998 to Hodges *et al.*;
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The following references (copies enclosed) were cited in the parent International Application Serial No. PCT/US2002/041588 (our file UCSD-07567):

- U.S. Patent No. 5,449,781 issued 9/12/95 to Varki *et al.*;
- Toomre and Varki (1994) "Advances in the use of biotinylated diaminopyridine (BAP) as a versatile fluorescent tag for oligosaccharides," *Glycobiol.* 4:653-663; and
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Applicant has become aware of the following printed publications (copies enclosed) which may be material to the examination of this application:

- Schmidt *et al.* (2001) "The multiligand receptor RAGE as a progression factor amplifying immune and inflammatory responses," J. Clin. Invest. 108:949; Schmidt *et al.* reviews the role of the receptor for advanced glycation endproducts (RAGE) in propagating cellular dysfunction in a number of pathophysiological conditions, such as diabetes, immune and inflammatory responses and tumors. However, Schmidt *et al.* does not disclose isolating anionic BAP-glycan conjugates having from 1 to 2, or 1 to 4, negative charges per molecule or antibodies that are specific for these conjugates; and
- Srikrishna *et al.* (2001) "Two Proteins Modulating Transendothelial Migration of Leukocytes Recognize Novel Carboxylated Glycans on Endothelial Cells," J. Immunol. 166:4678. Srikrishna *et al.* discloses fractionation of bovine lung glycopeptides on DEAE Sephadex A25 columns followed by testing the fractions for their ability to inhibit binding of mAbGB3.1 to immobilized bovine lung glycans. Eluates from the column were desialylation by mild acid treatment, methylamidation to neutralize about 80% of the carboxylate groups. The efficacy of methylamidation was determined by loss of reactivity with mAbGB3.1. However, Srikrishna *et al.* does not disclose the step of isolating anionic BAP-glycan conjugates having from 1 to 2, or 1 to 4, negative charges per molecule. Rather, Srikrishna *et al.*'s methods used heat-inactivated glycopeptides rather than BAP-glycan conjugates. Also, Srikrishna *et al.* did not isolate BAP-glycan conjugates having from 1 to 2, or 1 to 4, negative charges per molecule.

This Information Disclosure Statement under 37 C.F.R. §§ 1.56 and 1.97 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one or more of these citations prior art.

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